surface; and

at least one pressure relief trench formed in the raised bearing proximate to a contact interface position between the trailing edge of the slider and disc surface, the trench being sized to reduce capillary pressure of the meniscus along the disc surface.

2. The slider of claim 1 wherein the slider includes a center rail and the center rail includes a pressure relief trench.

3. The slider of claim 1 including a transversely aligned pressure relief trench.

4. The slider of claim 3 wherein the transversely aligned pressure relief trench is opened at opposed ends thereof to form a through channel.

5. The slider of claim 1 including a longitudinally aligned pressure relief trench.

6. The slider of claim 1 including a sloped pressure relief trench.

7. The slider of claim 1 wherein the slider includes a plurality of spaced pressure relief trenches.

8. The slider of claim 1 wherein the slider includes opposed side rails and the side rails include a pressure relief trench.

9. The slider of claim 5 wherein the longitudinally aligned pressure relief trench includes an opened end.

10. The slider of claim 1 wherein the trench includes a depth dimension sized so that separation of the slider and disc at the trench during contact of the slider with the disc surface is equal to or greater than $2R_e$ to balance capillary pressure and disjoining pressure of a lubricant fluid on the disc surface.

11. The slider of claim 1 wherein the trench is sized to provide a slider-disc interface in the toe- dipping regime.

12. A slider for supporting transducer elements for a data storage system comprising:

a rigid member including opposed leading and trailing edges and opposed upper and lower surfaces, the lower surface including raised bearing surfaces, the trailing edge being adapted to support a transducer element;

landing pads extending from a bearing surface and adapted to define a contact interface with a disc surface; and

pressure relief means proximate to a contact interface position between the trailing edge of the slider and disc surface to reduce capillary pressure of the meniscus to limit area of the meniscus.

13. The slider of claim 12 wherein the pressure relief means includes at least one trench formed in a bearing surface and extending below a bearing surface.

14. The slider of claim 12 wherein the trench includes a

depth dimension sized so that separation of the slider and disc at the trench during contact of the slider with the disc surface is equal to or greater than $2R_c$ to balance capillary pressure and disjoining pressure of a lubricant fluid on the disc surface.

15. The slider of claim 12 wherein the trench is sized to provide a slider-disc interface in the toe- dipping regime.

16. The slider of claim 12 including a transversely aligned trench.

17. The slider of claim 12 including a longitudinally aligned trench.

18. The slider of claim 12 including a sloped trench.

19. The slider of claim 12 wherein the slider includes opposed side rails and the side rails include a trench.

20. The slider of claim 12 wherein the slider includes a center rail and the center rail includes a trench.